

REMARKS

Rejection of the claims under 35 USC § 112:

Claim 12 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for lack of antecedent basis for the limitation “wherein the mammalian cell”. Applicants have canceled the claim.

Rejection of the claims under 35 USC § 102:

Claims 1, 4-6, and 12-14 have been rejected under 35 U.S.C. 102(b) as being anticipated by Bennett et al. (U.S. Patent 6,000,344, '344). Applicants respectfully disagree. '344 teaches that a variety of chemical groups can be attached to an antisense RNA oligonucleotide and provides a laundry list potential chemical groups. '344 also teach that these modified antisense RNAs may be combined with delivery agents. However, '344 does not teach, nor suggest, that such groups may be used to enhance interaction of the antisense RNA with a transfection reagent. '344 does not teach any combination of modified antisense RNA and delivery agent wherein the interaction of the antisense RNA with the delivery agent is increased through modification of the RNA. While '344 teaches that cholesterol may enhance the activity, cellular distribution or cellular uptake of the oligonucleotide, '344 does not teach that cholesterol, or any other modification, may increase the interaction of the oligonucleotide with a transfection reagent. '344 teaches that: a) liposomes contain an aqueous interior which contains the composition to be delivered (column 17 lines 40-44); and, b) negatively charged liposomes entrap rather than complex DNA (column 18 lines 30-34). Thus, '344 does not teach association of nucleic acid with liposomes via modification of the nucleic acid. '344, like Bennett et al. U.S. Patent 6,156,789 (Office Action dated June 28, 2005) also does not teach or suggest the labile, or reversible, modification of an antisense RNA. Applicants request reconsideration of this § 102 rejection.

Rejection of the claims under 35 USC § 103:

Claims 1, 4-10, and 12-14 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al., Tuschl et al., Hammand et al. (Nature 2001), and Goldsborough (WO 01/94626) as evidenced by Letsinger et al. (PNAS 1989). Applicants respectfully disagree for the reasons cited above in response to the § 102 rejection. Applicants request reconsideration of this § 103 rejection.

The Examiner's rejections are now believed to be overcome by this response to the Office Action. In view of Applicants' amendment and arguments, it is submitted that claims 1, 4-10, 13, and 14 should be allowable.

Respectfully submitted,

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I hereby certify that this correspondence is being transmitted to the USPTO on this date: January 24, 2007.

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